about the role of "second-look" laparotomy in the management of ovarian carcinoma. Here the sensitivity of the test is only 33%, but the specificity is 100%. The negative predictive value is 57%, and the positive predictive value is 100%. Thus, a second-look laparotomy is unnecessary in a patient with an elevated CA 125 level except in a research setting where the quantification of disease is essential for evaluating experimental protocols.

Several studies have investigated the usefulness of CA 125 levels as a screening test. Evaluating 1,020 female blood donors using a cutoff of 65 U per ml resulted in a 1.8% positive test rate. Of these, 0.7% were pregnant and only 0.3% tested positive at a second screening. Cervical adenocarcinoma, endometrial adenocarcinoma, fallopian tube carcinoma, and nongynecologic cancerous lesions such as those of the pancreas, lung, liver, breast, colon, stomach, and biliary tract have also been associated with elevated CA 125 levels. Yet elevated CA 125 levels do not necessarily imply the presence of malignancy, as elevations have also been seen with benign conditions such as pregnancy, endometriosis, menstruation, pelvic inflammatory disease, pancreatitis, peritonitis, benign ascites, and leiomyomata. Selecting a patient population with a pelvic mass for screening CA 125 levels increases the usefulness of the test. Here the sensitivity is 93% and the specificity is 87%.

In conclusion, CA 125 levels are useful in the management of ovarian carcinoma, as levels correlate with the volume of ovarian cancer present. CA 125 functions as a leading indicator of disease progression but loses considerable sensitivity during the course of disease. Likewise the predictive value of a positive test is excellent, but a decline in the value of a negative test is observed during therapy. The selection of drug-resistant cell lines that have lost the ability to make CA 125 undoubtedly contributes to these results. Further research in the area of tumor markers now focuses on the usefulness of the simultaneous measurement of several markers. It is hoped that such an approach will further facilitate the diagnosis and treatment of ovarian carcinoma.

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Drug Therapy for Genital Herpes

ACYCLOVIR, a synthetic purine nucleoside analogue, is effective when taken orally or intravenously for primary or recurrent genital herpes. During a one-year treatment trial for frequently recurring genital herpes—that is, six or more recurrences per year—the likelihood of being symptom-free for a year was increased from 2% to 44% and the mean number of recurrences reduced from 11.4 to 1.8. This degree of efficacy has led to longer treatments. But concerns that remain unanswered include the probability of viral resistance developing and increased or additional toxicity. With short-term courses, the most common adverse effects are nausea and vomiting, occurring in about 3% of patients.

The intravenous use of acyclovir requires admitting to hospital and is generally reserved for patients with life-threatening infections. Topical acyclovir is not as effective as oral, has limited efficacy in treating recurrent disease, and has no demonstrated ability to prevent recurrences. For primary genital herpes, administering acyclovir orally, 200 mg five times a day for five to ten days, has been effective in reducing the duration of shedding and severity and duration of symptoms.

Acyclovir prophylaxis—400 mg twice a day—for patients with frequent or severe recurrences has been administered for at least a year in clinical trials. Most cases with acyclovir-resistant organisms have been found in immunocompromised patients. Such resistance has thus far not been associated with progressive disease, and in most instances subsequent recurrences were caused by acyclovir-sensitive organisms. Further studies are required to determine whether long-term suppression reduces or facilitates the emergence of clinically important drug-resistant mutants in this population.

The use of acyclovir in pregnancy, breast-feeding mothers, or newborns has not been shown safe. The Burroughs Wellcome Company has a registry of its use in pregnancy (telephone number [919] 248-4017). No specific adverse effects on mothers or fetuses have been recognized. For women with primary herpes in pregnancy, some authors have recommended using acyclovir because of initial reports of associated preterm labor and slowed intrauterine growth rate. Others, however, would only recommend its use during pregnancy or childhood for life-threatening disease or herpes simplex virus infection of immunocompromised patients. Women with visible genital herpes at the beginning of labor are advised to have delivery by cesarean section to avoid the serious consequences of neonatal herpes. Many cases of neonatal herpes result from genital excretion of herpes simplex virus type 2 by a mother who may never have experienced genital herpes symptoms. Viral cultures before labor do not predict later exposures, but cultures obtained during labor of women with previous genital herpes may be valuable in identifying babies at risk for infection and lead to more timely treatment.

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β-Streptococcal Cultures in Obstetrics

β-HEMOLYTIC STREPTOCOCCI play a role in two major areas of obstetrics: puerperal fever (primarily group A or *Streptococcus pyogenes*) and antepartum and intrapartum infections (primarily group B or *Streptococcus agalactiae*). All standard antibiotic regimens for the treatment of puerperal fever or postpartum endomyometritis include coverage for group A streptococci, and this organism is no longer responsible for the mortality that it was in the past. Group B streptococci, on the other hand, have recently been recognized as important pathogens in neonatal sepsis and possibly as etiologic agents for preterm premature rupture of the membranes and chorioamnionitis.